

Subs. B1

1. (Once Amended) A non-ion exchanging activated carbon composition comprising an activated carbon and 0.01 to 5 percent by weight of a carboxylic acid containing compound based on the dry weight of activated carbon, wherein water passing through the activated carbon experiences a pH deviation of less than 1 pH unit.

Subs. B1

4. (Once Amended) The activated carbon composition as claimed in claim 2 wherein the water is present in an amount of from 20 to 60 percent by weight.

G2

5. (Once Amended) The activated carbon composition as claimed in claim 2 wherein the water is present in an amount of from 0.1 to 20 percent by weight.

6. (Once Amended) The activated carbon composition as claimed in claim 1 wherein the activated carbon is derived from one or more selected from the group consisting of bituminous coal; anthracite; lignite; wood; peat; coconut shells; and synthetic polymers.

G2

7. (Once Amended) The activated carbon composition as claimed in claim 1 wherein the carboxylic acid containing compound is selected from hydroxy carboxylic acids and their corresponding salts.

8. (Once Amended) The activated carbon composition as claimed in claim 7 wherein the hydroxy carboxylic acids and their corresponding salts are one or more selected from the group consisting of citric acid, ascorbic acid, erythorbic acid, glycolic acid, lactic acid, salicylic acid, hydroxybutyric acid, hydroxyvaleric acid, and their corresponding ammonium, sodium, and potassium salts

9. (Once Amended) The activated carbon composition as claimed in claim 1 wherein the carboxylic acid containing compound is one or more carboxylic acid containing compounds selected from the group consisting of sequestering agents, buffers, base neutralizers, antioxidants, and reducing agents.

10. (Once Amended) A method of preparing an activated carbon composition comprising the step of immersing an activated carbon in an aqueous solution of

Ref B1

a carboxylic acid containing compound, wherein the activated carbon composition comprises an activated carbon and 0.01 to 5 percent by weight of the carboxylic acid containing compound based on the dry weight of activated carbon, such that water passing through the activated carbon experiences a pH deviation of less than 1 pH unit.

Ref B1

11. (Once Amended) The method of preparing an activated carbon composition of claim 10 wherein the carboxylic acid containing compound is adsorbed onto the surface of the activated carbon.

Ref B1

15. (Once Amended) The method of preparing an activated carbon composition of claim 10 wherein the activated carbon is immersed for from 0.5 to 48 hours.

Ref B1

16. (Once Amended) The method of preparing an activated carbon composition of claim 10 further comprising the step of drying the activated carbon composition at from 20 to 250°C for from 0.5 minutes to 12 hours.

AS

17. (Once Amended) A method of removing impurities from an aqueous system comprising:

- a) providing an activated carbon composition comprising a carboxylic acid material adsorbed onto the surface of an activated carbon; and
- b) passing an aqueous stream through the activated carbon composition, wherein the pH of the aqueous stream deviates less than 1 pH unit after passing through the activated carbon composition.

18. (Once Amended) The method of removing impurities from an aqueous system of claim 17 wherein the carboxylic acid containing compound is present in the activated carbon composition in an amount of from 0.01 to 5 percent by weight based on the dry weight of activated carbon.

19. (Once Amended) The method of removing impurities from an aqueous system of claim 17 wherein the activated carbon is derived from one or more selected from the group consisting of bituminous coal; anthracite; lignite; wood; peat; coconut shells; and synthetic polymers.

Sub B1 cont

20. (Once Amended) The method of removing impurities from an aqueous system of claim 17 wherein the carboxylic acid containing compound is selected from hydroxy carboxylic acids and their corresponding salts.

A3 cont

21. (Once Amended) The method of removing impurities from an aqueous system of claim 20 wherein the hydroxy carboxylic acids and their corresponding salts are one or more selected from the group consisting of citric acid, ascorbic acid, erythorbic acid, glycolic acid, lactic acid, salicylic acid, hydroxybutyric acid, hydroxyvaleric acid, and their corresponding ammonium, sodium and potassium salts.

22. (Once Amended) The method of removing impurities from an aqueous system of claim 17 wherein the carboxylic acid containing compound is one or more carboxylic acid containing compounds selected from the group consisting of sequestering agents, buffers, base neutralizers, antioxidants, and reducing agents.

23. (Once Amended) A method of removing impurities from an aqueous system comprising the steps of:

providing a bed of an activated carbon composition comprised of an activated carbon and a carboxylic acid containing compound; and

passing the aqueous solution through the bed of the activated carbon composition such that there is a flow of an aqueous solution to be purified into the bed and a flow of purified aqueous solution from the bed.

Sub B1

25. (Once Amended) The method as claimed in claim 23 wherein the carboxylic acid containing compound is adsorbed onto the surface of the activated carbon and is present in an amount of from 0.01 to 5 percent by weight based on the dry weight of activated carbon.

A4

26. (Once Amended) The method as claimed in claim 23 wherein the carboxylic acid containing compound is selected from hydroxy carboxylic acids and their corresponding salts.

Subs. B1

27. (Once Amended) The method as claimed in claim 26 wherein the hydroxy carboxylic acids and their corresponding salts are one or more selected from the group consisting of citric acid, ascorbic acid, erythorbic acid, glycolic acid, lactic acid, salicylic acid, hydroxybutyric acid, hydroxyvaleric acid, and their corresponding ammonium, sodium and potassium salts.

Subs. C1

28. (Once Amended) The method as claimed in claim 23 wherein the carboxylic acid containing compound is one or more carboxylic acid containing compounds selected from the group consisting of sequestering agents, buffers, base neutralizers, antioxidants, and reducing agents.

Please add new claims 29-35.

Subs. B1

--29. The activated carbon composition of claim 1 prepared by soaking the activated carbon in a solution containing the carboxylic acid containing compound.

Subs. B1

30. The activated carbon composition of claim 1 wherein the carboxylic acid containing compound occupies the high energy adsorption sites of the activated carbon.

Subs. B1

31. The method of preparing an activated carbon composition of claim 10 wherein the carboxylic acid containing compound occupies the high energy adsorption sites of the activated carbon.

Subs. B1

32. The method of claim 17, wherein the activated carbon composition is prepared by soaking the activated carbon in a solution containing the carboxylic acid containing compound.

Subs. B1

33. The method of claim 17, wherein the carboxylic acid containing compound occupies the high energy adsorption sites of the activated carbon.

Subs. B1

34. The method of claim 23, wherein the activated carbon composition is prepared by soaking the activated carbon in a solution containing the carboxylic acid containing compound.